Plan envisages launch of one more experimental satellite, namely, GSAT-4, using GSLV, apart from operational satelites.

(b) With the success of GSLV, ISRO has achieved self-sufficiency to launch satellites of 2000 kg. class into Geo-synchronous Transfer Orbit (GTO). Apart from launching 2000-kg class operational satellites, these missions will be useful to evaluate advanced technologies in payload and bus-systems of spacecraft.

Air navigation over the Indian Air Space

3162. SHRIMATI N.P. DURGA : Will the PRIME MINISTER be pleased to state:

(a) whether ISRO, in co-ordination with AAI, is working to build air navigation over the Indian Air Space;

(b) if so, the details thereof;

(c) whether any time-frame has been fixed for technology demonstration; and

(d) if so, the details thereof?

THE MINISTER OF STATE IN THE DEPARTMENT OF SPACE (SHRI SATYABRATA MOOKHERJEE): (a) and (b) Yes, Sir. The Indian Space Research Organisation (ISRO) in coordination with the Airports Authority of India is working on a Proof of Concept Technology Demonstration System (TDS) for Satellite Based Augmentation System (SBAS). This is the first step towards introduction of satellite based Communications, Navigation, Surveillance (CNS) Air Traffic Management (ATM) services over the Indian Airspace.

The TDS will have the necessary infrastructure in space and on-ground to demonstrate the concept. Initially, for the demonstration a network of ground reference stations and master control station, ground uplink station and satellite navigation payload in space is planned.

(c) and (d) A time-frame of four years is anticipated for Proof of Concept demonstration.